

**MAJOR FINANCIAL CHANGES IN THE  
HIGHWAY TRUST FUND SINCE 1956**

**Staff Working Paper**

**The Congress of the United States  
Congressional Budget Office**

**November 1982**



---

## PREFACE

---

During the Special Session that starts November 29, the Congress is likely to consider an extension of the Highway Trust Fund beyond its current expiration date of September 30, 1984. Such an extension is necessary if the highway program is to be authorized for the full year. Currently, the Byrd Amendment restricts the level of authorizations.

This Staff Working Paper was prepared at the request of the House Committee on Public Works and Transportation. It is designed to provide a historical perspective on the past changes in the financial condition of the Highway Trust Fund. In particular it describes the various means by which the Congress determines the level of spending from the Highway Trust Fund. In keeping with CBO's mandate to provide objective analysis of issues before the Congress, this report offers no recommendations.

The author of this paper is Richard R. Mudge. It was prepared in CBO's Natural Resources and Commerce Division under the supervision of Damian J. Kulash and David L. Bodde. Valuable comments were received from Patrick J. McCann of CBO's Budget Analysis Division, from Clyde Woodle, Jeff O'Neal, and Kenneth House of the House Committee on Public Works and Transportation, and from Pam Pecarich of the House Committee on Ways and Means.

Alice M. Rivlin  
Director



---

## SUMMARY

---

The Highway Trust Fund was established in 1956 as the means of financing the new Interstate Highway System as well as other federal highway programs. It receives revenues from a series of taxes on highway users, most importantly a four-cents-per-gallon tax on motor fuel and several taxes on trucks.

Most federal programs pass through four stages: authorization, appropriation, obligation, and outlay, with budget authority not created until the appropriation process. By contrast, the Highway Trust Fund continues the practice started in the early 1920s of creating budget authority (termed contract authority) at the authorization stage. Thus funds are made available to the states for obligation without first being appropriated. The appropriations committees provide liquidating appropriations just prior to the outlay of funds.

The Highway Trust Fund has passed through two stages in its financial history and appears recently to have entered a third. In its first decade, the fund was characterized by a very low cash balance--on average less than \$500 million. During the first few years, the Congress added revenues to the fund by increasing highway taxes and was forced to defer temporarily application of the Byrd Amendment. During the late 1960s, a second stage began that saw the cash balance grow to a total of \$12.6 billion by the end of 1979. Steady growth in highway use during the 1960s and early 1970s helped to increase revenues, while a series of Presidential impoundments of highway funds held down outlays. Also important was the fact that starting in 1973, the Highway Trust Fund extended for only one year beyond the last year of full highway authorization. (Such an overhang is feasible since there is normally a two- to three-year delay between the authorization of funds and their cash outlay.) This relatively short overhang reduced the amount of funds that could be authorized, so that outlays were lower than they otherwise might have been.

Since 1978, a third stage appears to have started. The cash balance in the fund has dropped (by \$3.5 billion), and appears likely to continue to decline for the next few years. There appear to have been two causes for this change: first, a much slower growth in tax receipts as higher fuel prices encouraged more conservation; and, second, the extension of the Highway Trust Fund to 1984, two years beyond the last year of full authorization. This additional year of revenues permitted somewhat higher authorizations.

There are several limits on the amount of contract authority that can be created in the authorization process. Most important, the financing committees determine the funds available by fixing the level of taxes paid



into the trust fund and by setting the number of years for which taxes are to be collected. A second major constraint is provided by the Byrd Amendment--a part of the act that established the Highway Trust Fund in 1956. This requires the Secretary of the Treasury to determine if there will be sufficient funds available to cover expected outlays during the next year and over the remaining life of the trust fund. If there will not be enough cash (including both cash on hand at the start of the year and revenues to be received) the amount of authorizations made available to the states at the start of the fiscal year will be restricted to ensure that adequate cash is available.

This paper contains five sections: a description of the process by which the federal highway program is financed; a survey of major changes in the financial condition of the Highway Trust Fund since 1956; a brief discussion of some of the factors causing these changes; a description of the mechanisms currently used by the Congress to control the level of spending from the trust fund; and finally, a discussion of two highway program options and how they would affect the finances of the Highway Trust Fund.





## THE HIGHWAY FINANCING PROCESS

### Creation of the Highway Trust Fund

The financing process for federally aided highways was initiated in the early 1920s, under the Federal Highway Act of 1921 and the Post Office Appropriation Act of 1922. These acts required the Secretary of Treasury to set aside amounts certified to be needed for approved projects by the Secretary of Agriculture (then responsible for highway programs). This meant that funds authorized for highway projects became budget authority without first being appropriated. In addition, this legislation stipulated that projects approved by the Secretary of Agriculture were to be contractual obligations of the federal government. The authority to obligate authorized federal funds, known as contract authority, has thus been a key feature of federal highway programs for more than half a century.

Until 1956, funds for federal highway programs were taken from general revenues. While the federal government had imposed some form of taxes on highway users since 1917, including a fuel tax beginning in 1932, receipts from such taxes were paid directly to the Treasury. <sup>1/</sup> There was no formal link between highway tax receipts and federal spending on highways until the establishment of the Highway Trust Fund in 1956. (Before then, however, authorizations appear to have been "geared very largely to the receipt of funds from the gas tax," <sup>2/</sup> and the overall balance between federal highway receipts and federal highway expenditures was taken into consideration when either was altered.)

The 1956 Highway Act specifically earmarked receipts from road user taxes for expenditure on highway programs. Beginning July 1, 1956, receipts from various road user taxes were to be placed in the Highway Trust Fund rather than in the general fund of the Treasury, and when cash was needed to pay for highway construction it was to be taken from the Highway Trust Fund. This approach was used both for the already existing highway programs and for the newly planned Interstate system. During the debate over how to finance the latter project, which was expected to require 13 years to complete at an estimated federal cost of \$25 billion, the use of

- 
1. The 1917 tax was a 3 percent sales tax on new vehicles. In 1932, a 1 cent per gallon tax on gasoline was imposed. Diesel fuel taxes started in 1951.
  2. Congressman Henry B. Scudder, National Highway Program, Hearings before the House Committee on Public Works, 84:1 (1955), p. 34. Also, the Hayden-Cartwright Act of 1934 declared that it was unfair for state governments to tax highway users without using the receipts for highway spending.



long-term bonds was rejected in favor of the more conservative "pay as you build" approach embodied in the Highway Trust Fund. <sup>3/</sup>

The 1956 Highway Act called for a trust fund extending for 16 years to 1972, three years beyond the last year of authorizations for the Interstate. The three additional years of revenues were to ensure that there would be a balance between total receipts and expenditures over the life of the program. (See the next section for a description of the normal delays between authorization and outlays.) The tax increases called for in the act were relatively modest, however: only a penny increase in the motor fuel tax to three cents per gallon, for example. As a result, the trust fund as proposed in the original House bill was projected to have a cash deficit for most of the 1960s, peaking at \$4.8 billion in 1969. These annual deficits were to be financed over the short term by borrowing from the general fund, <sup>4/</sup> and eventually by tax receipts during the three years that the trust fund continued after the Interstate network was expected to be completed. While the trust fund was also to be used to finance non-Interstate programs (the most important at the time being the Primary and Secondary road systems), there was no clear indication of what was to happen to the Highway Trust Fund once the Interstate was completed.

The idea of a debit balance in the trust fund was opposed by many Members of the Congress and by the Secretary of the Treasury. As a result, the Senate passed and the House accepted the Byrd Amendment to the original House bill. In addition to prohibiting a deficit over the life of the trust fund, this amendment prohibited the fund from going into deficit in any particular year. As stated in the Senate Report, it was "designed to give assurance that no deficit will develop in the highway trust fund." <sup>5/</sup> In effect, this would "give assurance of Congressional reconsideration of the highway program at any time in the future that revenues appeared inadequate to meet the highway program presently planned since either new revenues will have to be raised at such a time or the expenditure program will have to be curtailed or postponed." <sup>6/</sup> The Byrd Amendment is discussed in detail in a later section of this paper.

- 
3. Congressional Budget Office, Highway Assistance Programs: A Historical Perspective, Background Paper (February 1978).
  4. The trust fund retains its original authority to borrow from the general fund (termed repayable advances), but incorporation of the Byrd Amendment in the 1956 act makes this of little practical effect.
  5. While the Byrd Amendment prohibits a cash deficit at the end of the fiscal year, a deficit during the year is technically permissible.
  6. Senate Report 2054, May 25, 1956, accompanying H. R. 10660.



Before moving on to the development of the trust fund since 1956, it will be useful to outline how the financing process created in 1956 operates.

### Mechanics of the Highway Trust Fund

Most federal programs pass through four stages: authorization, apportionment, obligation, and outlay. Budget authority is not created until the funds have been appropriated. By contrast, federal funds for highways pass through five steps from the time they are authorized until the time the cash is actually paid from the Highway Trust Fund and budget authority is created in the first step. These steps are:

- o Authorization;
- o Apportionment;
- o Obligation;
- o Appropriation; and
- o Outlay.

Each step is described briefly below.

Authorization. The highway financing process begins with the passage of an authorization bill. Since the Highway Trust Fund was created, authorizing legislation has generally been passed about every two years, although the interval has sometimes been longer. Almost all the funds authorized to be spent from the Highway Trust Fund are in the form of contract authority--giving the Secretary of Transportation the authority to enter into contracts that obligate the federal government to pay the amounts authorized. Contract authority permits the highway program to bypass the normal appropriations process, an important element providing long-term security to state highway departments. As noted earlier, contract authority has been part of the federal highway program for over 60 years.

Apportionment. Contract authority is usually apportioned among the states on the first day of each fiscal year. For most programs, the share going to each state is determined by legislated formulas. For others, the allocation is determined at the discretion of the Federal Highway Administrator. The Byrd Amendment requires that apportionment not take place until the Secretary of the Treasury determines that the Highway Trust Fund will have sufficient covering funds. Otherwise, apportionments must be reduced to the level of funds projected to be available.

Obligation. Once funds are made available to the states, they may begin to issue contracts for eligible construction activities. They do so secured by a federal commitment to reimburse them for these costs, as long



as the projects have been approved by the Federal Highway Administration or as long as a state's program has been certified by the Federal Highway Administration.

Obligation of highway funds generally takes place gradually, in many small steps, over a period of several years. The time when a state may obligate its apportioned funds varies from program to program. Funds for the Interstate program are apportioned one year in advance of the fiscal year, and are available for obligation for two years thereafter. For example, funds for fiscal year 1984 (October 1, 1983 - September 30, 1984) were apportioned in October 1982 and can be obligated anytime between October 1982 and the end of September 1984.

For other highway programs, apportioned funds are available for obligation throughout a four-year period. Unlike Interstate apportionments, other highway programs cannot be obligated one year in advance of the fiscal year for which they are authorized. Thus, the fiscal year 1983 apportionment for the Primary system, which was made in October 1982, can be obligated anytime between then and the end of September 1986.

Because apportioned funds are available for obligation for more than one year, and because they may be available before the year for which they are authorized (as with the Interstate program) or for several years after they are authorized (as with other programs), the timing of obligations does not coincide closely with that of apportionments or authorizations.

On average, only half of each highway dollar is obligated in the same fiscal year for which it is apportioned. Such delays are a key feature of federal highway finance--as well as of most other programs that involve capital construction. The multiyear window during which apportioned funds may be obligated is needed by the states to ensure continuity of large projects and stability of long-run planning.

Except for the Interstate program, funds lapse if they are not obligated by the end of the period for which they are available. <sup>7</sup>/ Histori-

- 
7. The present two-year period during which Interstate funds can be obligated was created by the 1978 Highway Act, which shortened the period from four years. At the same time, however, the 1978 act provided that funds not used by the states within this two-year period would be deposited in a fund for use by other states that have projects ready to go. Because funds for the Interstate program are apportioned among states in proportion to the cost to complete planned routes within each state, a state that permits Interstate funds to lapse will retain a higher cost to complete, thereby maintaining a higher share of program funds in future years. Thus, any state that permits its Interstate funds to lapse will eventually recover the lapsed funds through increased apportionments, as long as the Interstate program is continued. This is not the case for other highway programs, however, in which lapsed funds are forfeited by the states.





cally, states have not allowed any significant amount of highway funds to lapse.

Appropriation. Because authorization of programs through the Highway Trust Fund permits the obligation of federal funds, the appropriations process is no longer a meaningful way to control these expenditures. (In recent years, the Congress has placed ceilings on the amount of obligations that can be made in any particular year as a way of delaying the outlay of funds.) Nevertheless, the federal government cannot transfer the cash to reimburse states for the vouchers they submit until funds have been appropriated by the Congress. Such "liquidating appropriations" represent a recognition by the Congress of obligations already made, and do not serve as a control mechanism. Rather, separate controls have been established for this program, as will be discussed later.

Outlay. Finally, once states have completed projects (or parts of projects) and submitted vouchers for payment, and once the Congress has appropriated cash for the purpose of reimbursing the states for progress payments or for completed work, the federal government transfers funds to the states. This final outlay step typically comes about two-and-one-half years after the start of the year for which funds were authorized. In addition to the delay between apportionment and obligation discussed earlier, part of this long delay between authorizations and outlays stems from the time consumed during the construction process itself, because federal funds are used to reimburse states only for completed work.

#### MAJOR CHANGES IN THE HIGHWAY TRUST FUND SINCE 1956

Two major changes have taken place in the trust fund over the last 25 years. First, the maximum life of the fund has decreased considerably from sixteen years in 1956 to seven years in 1970, three years in 1976, and six years in 1978. At the same time, the length of the typical highway authorization has increased from two years to four years. Taken together, these two shifts in timing mean that taxes and program authorizations have increasingly been considered simultaneously by the Congress. Such simultaneous consideration makes for a stronger system of checks and balances among the authorizing and tax committees.

Second, the financial characteristics of the fund have changed considerably. During the 1960s and early 1970s, trust fund revenues grew steadily, mostly in response to growing highway use. Also, the Congress placed more tax revenues in the fund, most significantly through a one-penny increase in the motor fuel tax in 1959. Further, the real value of the fund tended to increase as long as inflation remained at relatively low levels. Given the long life of the trust fund in those years, the authorizing committees of the Congress would have had considerable leeway to make revisions in the program without requiring action by the financing committees, had not the low cash balance in the fund during those years restricted this freedom.



Now, however, trust fund revenues are growing very slowly and inflation is eroding the funds' purchasing power. <sup>8/</sup> This combined with the shorter life of the trust fund, limits the freedom of the authorizing committees as compared to earlier years, even though the cash balance is higher.

Over its first few years, the 1956 Highway Act called for authorizations well in excess of expected receipts. In addition, most of the unpaid authorizations from the pre-1957 highway program were assigned to the Highway Trust Fund for payment. As a result, the Congress suspended the Byrd Amendment (prohibiting deficits) for 1959 and 1960 only two years after it had become law. (See Table 1 for a summary of major highway financing changes since 1956.) A major argument for its suspension was the need to maintain highway spending during an economic recession. During 1960 and 1961, the trust fund exhausted its cash temporarily and was forced to borrow from the Treasury. By the end of 1961, however, the fund had a small, positive cash balance, and has never since shown a negative cash balance.

In 1959, the Congress took stronger action to improve the financial condition of the trust fund. The motor fuels tax was increased from three to four cents per gallon effective in 1960 and half of the 10 percent excise tax on new car sales was ordered to be paid into the trust fund. These changes were temporary, in part because the Congress was waiting for the results of a highway cost allocation study before making permanent tax changes. In order to avoid a projected imposition of the Byrd Amendment, the Congress also reduced the Interstate authorizations for 1961.

This reduction in the Interstate program was not enough, however, and in 1961 the Byrd Amendment took effect for the only time, restricting the apportionment of Interstate funds. (As originally written, the amendment restricted only Interstate funds. Later, in 1978, it was amended to apply equally to all apportioned funds.) In 1961, the Congress also made a number of significant permanent tax changes, including setting the motor fuel tax at four cents per gallon for the life of the trust fund and increasing the taxes on tires, tubes, tread rubber, and heavy vehicles. The truck excise tax was placed in the trust fund but the auto excise tax was removed. These changes increased trust fund revenues by almost 40 percent. The most recent change in trust fund finances occurred in 1965 (effective in 1966), requiring that the existing excise taxes on truck parts and lubricating oil be paid into the Highway Trust Fund instead of the general fund (increasing trust fund revenues by 3 percent). These changes, in particular those made in 1959 and 1961, solved the short-term financial problems of the fund. Steady growth in highway travel and relatively low inflation caused tax receipts to show a positive real growth rate through the early 1970s.

---

8. Although highway construction costs have actually declined in the last two years, this trend is not expected to continue.



**TABLE 1. MAJOR CHANGES IN FEDERAL LEGISLATION AFFECTING THE HIGHWAY TRUST FUND**

<b>Year</b>	<b>Target Date for Interstate Completion</b>	<b>Last Year of Full Authorization</b>	<b>Highway Trust Fund Expiration Date</b>	<b>Other Finance-Related Changes</b>
1956	1969	1959	1972	HTF established with Byrd Amendment; increased taxes on motor fuel, tires, tread rubber, trucks, trailers, set new tax on heavy vehicles.
1958		1961		Byrd Amendment suspended for 1959 and 1960 to ensure full apportionment of authorizations.
1959				To avoid imposition of Byrd Amendment, Interstate authorizations for 1961 reduced; fuel tax increased to 4 cents, and one-half of auto excise tax paid to HTF--both tax changes were temporary.
1960		1963		
1961	1971			Apportionment restricted for 1961 under Byrd Amendment. Taxes increased on tires, tubes, tread rubber, heavy vehicles. Fuel tax increase made permanent, all of truck excise tax placed in HTF, and auto excise tax removed from HTF.
1962		1965		
1964		1967		

(Continued)



TABLE 1. (Continued)

Year	Target Date for Interstate Completion	Last Year of Full Authorization	Highway Trust Fund Expira- tion Date	Other Finance- Related Changes
1965				Existing taxes on truck parts and lubricating oil paid into HTF.
1966	1972	1969		
1968	1974	1971		First extension of Interstate authorizations beyond end of HTF.
1970	1976	1973	1977	First extension of HTF. Excise tax on light trucks repealed. <u>a/</u>
1973	1979	1976		Fiscal year 1974 started without authorizations for non-Interstate programs. Major decrease in Interstate authorizations--from \$4 billion to \$2.6 billion.
1976	1990	1978	1979	HTF extended.
1978		1982	1984	HTF extended.
1982		1983		Byrd Amendment forces partial authorizations for 1983 as part of stopgap bill.

NOTE: This is by no means a comprehensive list of federal highway legislation since 1956. It includes only those acts that changed the taxes paid into the Highway Trust Fund or which extended authorizations for the Interstate or major non-Interstate programs. Between 1978 and 1982, the Congress passed four other acts that modified the highway program.

a. Part of repeal of auto excise tax, not part of Highway Act.





Throughout the 1960s and 1970s, there were regular reauthorizations of both Interstate and non-Interstate programs (see Table 2). Typically, these were biennial highway bills that provided for two more years of non-Interstate funding. The current pattern appears to be for four-year authorizations as in the original bills proposed by the House and Senate Committees on Public Works in 1982.

Interstate authorizations have been extended beyond the original completion target of 1969 as the costs of the system have grown in response to inflation, changes in design standards, environmental regulations, and the inclusion of new projects in the system. By 1968, the completion date was advanced to 1974 and for the first time extended beyond the planned expiration date for the Highway Trust Fund.

Over the most recent decade, higher fuel prices and greatly improved fuel economy have contributed to holding the trend of tax receipts below the rate of inflation in highway construction.

### OVERVIEW OF CHANGES IN HIGHWAY TRUST FUND FINANCE

There are several ways to measure the financial condition of the Highway Trust Fund. The cash balance is by far the most important, since this is the key factor that determines when and if the Byrd Amendment is to be invoked. A related measure is the number of additional years of receipts required to finance authorizations already made (usually called the overhang). Table 3 shows these measures and the information from which they are calculated, on an annual basis since the start of the trust fund. The change in the cash balance is simply tax receipts minus outlays. The number of years of additional revenues (overhang) is calculated by dividing the level of unfunded authorizations <sup>9/</sup> by the total trust fund revenues (including interest on the cash balance) expected for the next fiscal year. Unfunded authorizations are simply unpaid authorizations (total authorizations that have been apportioned or allocated less total outlays) minus the cash balance available to pay for them.

Since its start in 1957, the trust fund has passed through two phases: a period of tight financial strain during its first decade of existence characterized by tax increases in 1959 and 1961, and a later period during which outlays have lagged behind revenues and a sizable cash balance has built up in the fund. Recently, the Congress has started to draw down the cash balance. Since 1979, the balance has dropped by \$3.6 billion to about \$9.0 billion.

---

9. Excluding out-year Interstate authorizations as well as funds that have lapsed or were not appropriated.

